REMARKS

The Office Action dated November 19, 2002 has been carefully considered. Claims 1-8, 10-13 and 19-28 are currently pending in this Application and are presented for the Examiner's review and consideration. Claims 1, 11 and 19 have been amended to more clearly point out and claim the invention sought to be patented. Applicant appreciates the Examiner's indication of allowability of the subject matter of claims 3, 5-7, 12-13 and 22-27.

I. CLAIM REJECTIONS UNDER 35 U.S.C. § 112

Claim 4 was rejected under 35 U.S.C. § 112, first paragraph, as "containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention." More specifically, the Examiner questioned "[h]ow is the angle between the first and second toggle joints going to be between 175 to 180 degrees when the drawings show an acute angle when these toggles are in the locking position. Furthermore, what drawings disclose this limitation or range." This rejection is respectfully traversed.

The Examiner's attention is respectfully directed to page 4, lines 20 to 22 of the application as filed, where it states that "[t]he bar system consists of a first toggle joint 13 having a first joint 14 and a second joint 15, and a second toggle joint 16 having a first joint 17 and a second joint 18." As shown in Figure 2 of the application as filed, the angle that the two joints 14, 15 of toggle joint 13 form together in the locking position of the bar system is between about 175° and about 180°, as represented by the dashed line extending through swivel pins 21, 25 and 24. Likewise, the angle that the two joints 17, 18 of toggle joint 16 form together in the locking position of the bar system is between about 175° and about 180°, as represented by the dashed line extending through swivel pins 21, 27 and 26. Thus, applicants respectfully submit that this rejection of claim 4 is overcome.

II. CLAIM REJECTIONS UNDER 35 U.S.C. § 102

A. U.S. Patent No. 5,921,535 to Lutz, III ("Lutz")

Claims 1-2, 8, 10-11, 10-20 and 28 were rejected under 35 U.S.C. § 102(b) as being anticipated by Lutz. The Examiner stated that "Lutz discloses the claimed invention as disclosed in claims 1-2, 8, 10-11, 19-20, and 28. The two joints are elements (80 & 40)."

Independent claim 1 has been amended to clarify that "each toggle joint compris[es] two joints pivotally connected to one another." Support for this amendment is found in the application as filed at page 4, lines 20-22. Lutz does not disclose, teach or suggest a clamping tool having at least *two* toggle joints each comprising two joints pivotally connected to one another, as recited by amended claim 1. At best, Lutz discloses a *single* toggle joint comprising two joints (links 40 and 80). Thus, it is respectfully submitted that amended claim 1, and the claims dependent therefrom, are patentable over Lutz.

Independent claim 11 has been amended to clarify that "the first toggle joint comprises a first joint pivotally connected to a second joint, and the second toggle joint comprises a first joint pivotally connected to a second joint." Support for this amendment is found in the application as filed at page 4, lines 20-22. Lutz does not disclose, teach or suggest a clamping tool having a first toggle joint comprising a first joint pivotally connected to a second joint, *and* a second toggle joint comprising a first joint pivotally connected to a second joint, as recited by amended claim 11. Instead, as demonstrated above, Lutz discloses at best only a single toggle joint comprising two joints. Thus, it is respectfully submitted that amended claim 11, and the claims dependent therefrom, are patentable over Lutz.

Independent claim 19 has been amended to recite that "the clamping member exerts a first clamping force and a second clamping force . . . and the first clamping force is applied at an angle to the second clamping force." Support for this amendment is found in the application as filed at least at page 5, lines 24-27 and page 6, lines 12-16. Lutz does not disclose, teach or suggest a clamping tool having a clamping member that exerts a first clamping force and a second clamping force wherein the first clamping force is applied at an angle to the second clamping force. In fact, it is clear from the description and figures of the Lutz that the clamp disclosed therein only applies force in one direction, the vertical direction. Thus, it is respectfully submitted that amended claim 19, and the claims dependent therefrom, are patentable over Lutz.

III. CONCLUSION

Applicant respectfully submits that all pending claims comply with the requirements of 35 U.S.C. §112 and are allowable over the cited references, whether taken singly or in combination. Accordingly, this application is now in condition for allowance, early notice of which would be appreciated. Should the Examiner not agree that all claims

are allowable, then a personal or telephonic interview is respectfully requested to discuss any remaining issues and to accelerate the allowance of the above-identified application.

No additional fee is believed to be due for the submission of this response. Should any fees be required, however, please charge such fees to Pennie & Edmonds LLP deposit account no. 16-1150.

Respectfully submitted,

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APPENDIX A
Marked-Up Amended Claims

1. (Amended) A clamping tool for clamping a workpiece to a support by means of a bar system constructed of a number of mutually pivotal bars and comprising an activation bar for making the bars pivot mutually between an initial position and a locking position, a clamping bar having at least one thrust shoe for pressing against the workpiece in the locking position, and a base for mounting the bar system on the support, wherein the bar system furthermore comprises at least two toggle joints each toggle joint comprising two joints pivotally connected to one another, said two toggle joints arranged to substantially simultaneously assume a dead point position when the bar system is taken from the initial position to the locking position, and further wherein said two toggle joints form an angle with each other in the dead point positions.

11. (Thrice Amended) A clamping tool comprising:

a base member;

a bar system mounted to the base member and comprising a plurality of mutually pivotal bars including:

an activation bar pivotally mounted to the base member and being provided with a handle member;

a rocking bar also pivotally mounted to the base member and operatively connected to the activation bar via a first toggle joint; a clamping bar operatively connected to the activation bar via a second toggle joint and being pivotally mounted to said rocking bar;

wherein the first toggle joint comprises a first joint pivotally connected to a second joint, and the second toggle joint comprises a first joint pivotally connected to a second joint;

further wherein the first and second toggle joints substantially simultaneously assume respective dead point positions, when the bar system is moved from a first, unlock position to a second, locked position, and the first and second toggle joints form an angle with respect to one another when in the dead point positions.

19. (Amended) A clamping tool comprising:

a base member;

a bar system including a plurality of mutually pivotal bars mounted to the base member, including:

an activation bar pivotally mounted to the base member;

a rocking bar pivotally mounted to the base member and operatively connected to the activation bar via a first toggle joint;

a clamping member operatively connected to the activation bar via a second toggle joint and pivotally mounted to the rocking bar;

wherein the first and second toggle joints do not pass their respective dead point positions simultaneously when the bar system is moved from a first, unlocked position to a second, locked position;

further wherein the clamping member exerts a first clamping force and a second clamping force when the first and second toggle joints assume their respective dead point positions, and the first clamping force is applied [before] at an angle to the second clamping force.

APPENDIX B
Complete Set Of Currently Pending Claims

1. A clamping tool for clamping a workpiece to a support by means of a bar system constructed of a number of mutually pivotal bars and comprising an activation bar for making the bars pivot mutually between an initial position and a locking position, a clamping bar having at least one thrust shoe for pressing against the workpiece in the locking position, and a base for mounting the bar system on the support, wherein the bar system furthermore comprises at least two toggle joints each toggle joint comprising two joints pivotally connected to one another, said two toggle joints arranged to substantially simultaneously assume a dead point position when the bar system is taken from the initial position to the locking position, and further wherein said two toggle joints form an angle with each other in the dead point positions.

2. The clamping tool according to claim 1, wherein the two joints of each toggle joint together form an angle that points its point in the opposite direction of the at least one clamp shoe in the initial position of the bar system.

3. The clamping tool according to claim 1, wherein the two joints and respectively of each toggle joint together form an angle that point its point in a direction towards the at least one clamp shoe in the locking position of the bar system.

4. The clamping tool according to claim 3, wherein the angle that the two joints of each toggle joint form together in the locking position of the bar system is between about 175° and about 180°.

5. The clamping tool according to claim 1, wherein the bar system comprises:

a first swivel connection for pivotally journaling a first end of the activation bar in the base while a second end of the activation bar is free and serves as handle for the clamping tool;

a rocking bar which at a first end is pivotally journaled in the base via a second swivel connection which is nearer the at least one clamp shoe than the first swivel connection and at a second end is pivotally journaled in the clamping bar via a third swivel connection;

a first toggle joint having a first joint which at a first end is pivotally journaled in the clamping bar via a fourth swivel connection which is farther from the at least one clamp shoe than the third swivel connection, and at a second end is pivotally journaled in the activation bar via a fifth swivel connection, and a second joint consisting of the part of the activation bar that is extending from the fifth to the first swivel connection; and

a second toggle joint having a first joint which at a first end is pivotally journaled in one of the group consisting of the rocking bar and the clamping bar via a sixth swivel connection, and at a second end is pivotally journaled in the activation bar via a seventh swivel connection which in the locking position of the clamping tool is nearer the at least one clamp shoe than the first and the fifth swivel connection, and a second joint consisting of the part of the activation bar that is extending between the seventh and the first swivel connection.

6. The clamping tool according to claim 5, wherein the third and the sixth swivel connection coincide.

7. The clamping tool according to claim 5, wherein the sixth swivel connection is placed on the rocking bar between the second and the third swivel connection.

8. The clamping tool according to claim 1, wherein the first and the second toggle joint pass the dead point positions simultaneously when the bar system is taken from its initial position to its locking position.

10. The clamping tool according to claim 1, wherein the first joint of the first and second toggle joint respectively is shaped as a U having a bottom and two sides.

11. A clamping tool comprising:

a base member;

a bar system mounted to the base member and comprising a plurality of mutually pivotal bars including:

an activation bar pivotally mounted to the base member and being provided with a handle member;

a rocking bar also pivotally mounted to the base member and operatively connected to the activation bar via a first toggle joint; a clamping bar operatively connected to the activation bar via a second toggle joint and being pivotally mounted to said rocking bar;

wherein the first toggle joint comprises a first joint pivotally connected to a second joint, and the second toggle joint comprises a first joint pivotally connected to a second joint;

further wherein the first and second toggle joints substantially simultaneously assume respective dead point positions, when the bar system is moved from a first, unlock position to a second, locked position, and the first and second toggle joints form an angle with respect to one another when in the dead point positions.

12. The clamping tool according to claim 11, further comprising first and second clamping surfaces formed on the clamping member, said first and second clamping surfaces being directed substantially perpendicular to one another.

13. The clamping tool according to claim 12, further comprising first and second screws engaged to said clamping member wherein a first clamping surface is formed on said first screw and said second clamping surface is formed on said second screw.

19. A clamping tool comprising:

a base member;

a bar system including a plurality of mutually pivotal bars mounted to the base member, including:

an activation bar pivotally mounted to the base member;

a rocking bar pivotally mounted to the base member and operatively connected to the activation bar via a first toggle joint;

a clamping member operatively connected to the activation bar via a second toggle joint and pivotally mounted to the rocking bar;

wherein the first and second toggle joints do not pass their respective dead point positions simultaneously when the bar system is moved from a first, unlocked position to a second, locked position;

further wherein the clamping member exerts a first clamping force and a second clamping force when the first and second toggle joints assume their respective dead

point positions, and the first clamping force is applied at an angle to the second clamping force.

20. The clamping tool of claim 19, wherein the first clamping force is substantially transverse to the second clamping force.

21. The clamping tool of claim 19, further comprising first and second clamping surfaces formed on the clamping member, said first clamping surface being oriented substantially perpendicular to said second clamping surface.

22. The clamping tool of claim 19, wherein the first and second toggle joints each comprise two joints that together form an angle having a vertex that points away from the clamping member when the bar system is in the initial position.

23. The clamping tool of claim 19, wherein the first and second toggle joints each comprise two joints that together form an angle having a vertex that points toward the clamping member when the bar system is in the locked position.

24. The clamping tool of claim 23, wherein the angle is between about 175° and about 180° when the bar system is in the locked position.

25. The clamping tool of claim 19, wherein the bar system comprises:

a first swivel connection for pivotally connecting a first end of the activation bar to the base;

a second swivel connection for pivotally connecting a first end of the rocking bar to the base, the second swivel connection located nearer to the clamping member than the first swivel connection;

a third swivel connection for pivotally connecting a second end of the rocking bar to the clamping bar;

wherein the first toggle joint includes:

a first joint having a first end pivotally connected to the clamping bar via a fourth swivel connection, the fourth swivel connection located farther from the clamp member than the third swivel connection, and a second end pivotally connected to the activation bar via a fifth swivel connection; and

a second joint comprising the portion of the activation bar that extends from the fifth swivel connection to the first swivel connection;

further wherein the second toggle joint includes:

a first joint having a first end pivotally connected to one of the group consisting of the rocking bar and the clamping bar via a sixth swivel connection, and a second end pivotally connected to the activation bar via a seventh swivel connection, the seventh swivel connection located nearer to the clamp member than the first and fifth swivel connections when the bar system is in the locked position; and

a second joint comprising the portion of the activation bar that extends from the seventh swivel connection to the first swivel connection.

26. The clamping tool of claim 25, wherein the third swivel connection and the sixth swivel connection coincide.

27. The clamping tool of claim 25, wherein the sixth swivel connection is located on the rocking bar between the second swivel connection and the third swivel connection.

28. The clamping tool of claim 19, wherein the first joint of the first and second toggle joints has a substantially U-shaped cross-section.